IN THE CLAIMS

Replace the indicated claims with:

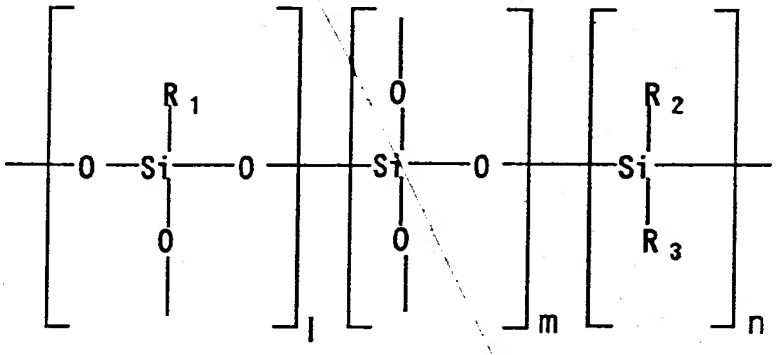
1. (Amended) A sensor element comprising:

a sensor substrate; and

a flat sensing portion supported by the sensor substrate; wherein the surface of the flat sensing portion is covered with a silicone resin film.

2. (Amended) The sensor element according to Claim 1 wherein the silicone resin film is a film of a cured silicone polymer.

3. (Amended) The sensor element according to Claim 2, wherein the silicone polymer is represented by the following general formula (1)



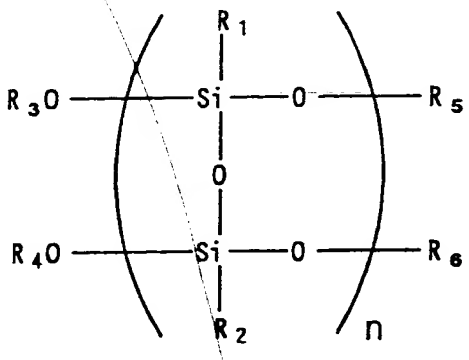
wherein

R1, R2, and R3, which may be the same or different, and are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, a hydroxyl, a trialkylsilyl, and a functional group having an unsaturated bond,

1, m, and n are integers and at least 0, and

the silicone polymer has a weight average molecular weight of not less than 1000.

4. (Amended) The sensor element according to Claim 2 wherein the silicone polymer is represented by the following general formula (2)



wherein

R1 and R2, which may be the same or different, and are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, and a functional group having an unsaturated bond,

R3, R4, R5, and R6, which may be the same or different, and are selected from the group consisting of hydrogen, an aryl, an aliphatic alkyl, a trialkylsilyl, and a functional group having an unsaturated bond,

n is an integers, and

the silicone polymer has a weight average molecular weight of not less than 1000.

5. (Amended) The sensor element according to Claim 3 wherein the silicone polymer is a photocuring polymer.

6. (Amended) The sensor element according to Claim 4 wherein the silicone polymer is a photocuring polymer.

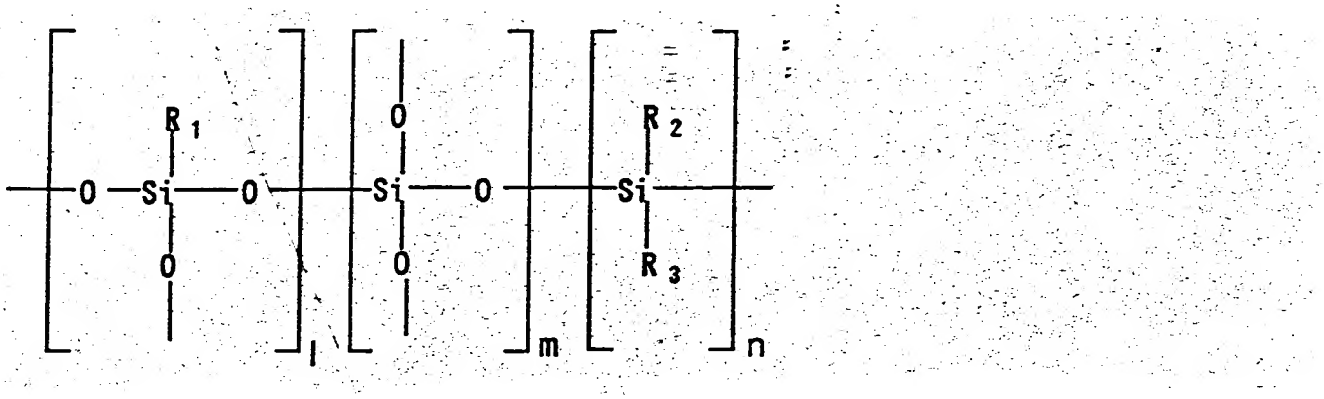
7. (Amended) The sensor element according to Claim 1 wherein the sensor element is selected from a magnetoresistance sensor, an air flow sensor, an acceleration sensor, a pressure sensor, a yaw rate sensor, and an image sensor.

8. (Amended) A method of fabricating a sensor element comprising

coating a flat sensing portion supported by a sensor substrate with a solution of a silicone polymer; and

heating and curing the solution to form a silicone resin film on the flat sensing portion.

9. (Amended) The method of fabricating a sensor element according to Claim 8 wherein the silicone polymer is represented by the following general formula (1)



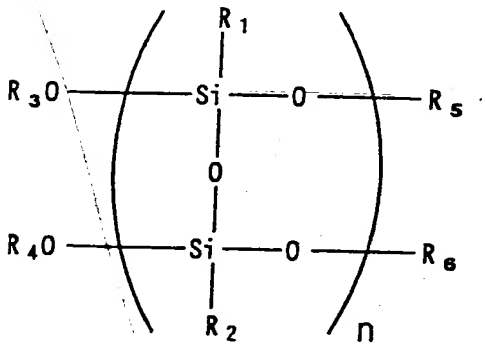
wherein

R1, R2, and R3, which may be the same or different, and are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, a hydroxyl, a trialkylsilyl, and a functional group having an unsaturated bond,

1, m, and n are integers and at least 0, and

the silicone polymer has a weight average molecular weight of not less than 1000.

10. (Amended) The method of fabricating a sensor element according to Claim 8 wherein the silicone polymer is represented by the following general formula (2)



wherein

R1 and R2, which may be the same or different, and are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, and a functional group having an unsaturated bond,

R3, R4, R5, and R6, which may be the same or different, and are selected from the group consisting of hydrogen, an aryl, an aliphatic alkyl, a trialkylsilyl, and a functional group having an unsaturated bond,

n is an integers, and

the silicone polymer has a weight average molecular weight of not less than 1000.

11. (Amended) The method of fabricating a sensor element according to Claim 9 including curing the silicone polymer with light.

12. (Amended) The method of fabricating a sensor element according to Claim 10 including curing the silicone polymer with light.

13. (Amended) The method of fabricating a sensor element according to Claim 8 including heating and curing the solution at a temperature of from 100°C to 250°C.